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CHAPTER 17

UPPER PALAEOLITHIC
MORTUARY PRACTICES
IN EURASIA

A critical look at the burial record

JULIEN RIEL-SALVATORE AND
CLAUDINE GRAVEL-MIGUEL

INTRODUCTION

Prehistoric burials excite the imagination of both lay and scholarly audiences. As culturally structured capstone events in the lives of people in the past, they offer a tantalizing if obstructed window into the psyche of our Palaeolithic forebears, and they resonate with human life histories even today. While Middle Palaeolithic interments are known, it is often said that burials only became a ubiquitous feature of human behaviour during the Upper Palaeolithic, when they became more numerous, elaborate, and widely distributed. Here, we present a detailed overview of the variability in Upper Palaeolithic burial among other mortuary practices. We conclude that the mainstream view is oversimplistic because it presents unusually lavish inhumations as the norm for the Upper Palaeolithic. We synthesize the available evidence for Upper Palaeolithic burial practices, and highlight tentative regional patterns of dis/continuity in mortuary practices.

Such a review is timely: recent discoveries have considerably expanded the corpus of known Upper Palaeolithic burials, which has broadened the range of behaviours associated with the disposal of the dead at that time. This new information articulates with a large body of evidence of uneven quality in their reporting accumulated over more than a century. Incorporating this new evidence helps provide an up-to-date register of known Upper Palaeolithic burials and permits a shift away from the interpretive weight given to poorly documented finds. Doing so also helps determine how well these new data agree with the trends in Upper Palaeolithic mortuary practices highlighted in earlier studies.

We begin by presenting a short overview of previous research on Upper Palaeolithic burials, and follow this with a detailed review of the available evidence to highlight trends in the record. We close with a discussion of the broader implications of our findings for the study of Upper Palaeolithic interments as a whole.

REVIEW OF PREVIOUS RESEARCH

Discussions of Upper Palaeolithic (UP) interments have often looked at them mainly in contrast with Middle Palaeolithic ones (e.g. Binford 1968, Harrold 1980, Riel-Salvatore and Clark 2001, Zilhão 2005). This means that Upper Palaeolithic mortuary behaviour has rarely been considered on its own, if we exclude general reviews that have described burials without really putting them in context (e.g. May 1986, Binant 1991). The few studies that have looked only at Upper Palaeolithic burials have tended to focus on patterns at a regional level (Palma di Cesnola 1993, 2006, Giacobini 2006b, 2007, Trinkaus and Svoboda 2006). This body of research nonetheless provides a number of test hypotheses that can be evaluated using a database that comprises several newly reported Upper Palaeolithic burials.

Harrold (1980) observed that, in the UP, males were more frequently buried than females, but that there was little difference in how they were buried. He documented a wide range of body positions and of burial goods, as well as the fact that multiple burials appear to have been relatively common (cf. Formicola 2007). These trends are also visible in the Italian Gravettian (Mussi 1986), though, in this region, women and children were more frequently interred during the later phases of the Epigravettian, when burial goods in general also became scarcer and less elaborate. The Italian data underscore that UP burials were highly clustered in time and space, being constrained to narrow time spans (e.g. the Gravettian) and regions (e.g. Liguria). The patchiness of the UP funerary record is also supported by the Central European evidence, which is largely restricted to the Pavlovian, a local variant of the Gravettian (Trinkaus and Svoboda 2006).

Building on this recognition, however, Giacobini (2007: 19–20) recently remarked that while ‘the observed variability of burial forms during the Upper Paleolithic remains very great, and each case reveals its own particular characteristics... to bury a deceased individual at that time still represented an exceptional event, and was probably limited to those who held a special position within their group’ and that the specific features and history of individual interments mean that ‘each burial appears unique and tells a different story.’ This perspective rightly emphasizes that there are fewer than five preserved UP burials per millennium in Eurasia. It also recognizes that the rarity of burials is likely to reflect at least in part some socially meaningful decisions by UP foragers.

A more burial-specific perspective also underpins much recent work on UP burials, which focuses on individual burials and/or sites (e.g. Pettitt et al. 2003; Formicola et al. 2004, 2005; Oliva 2000; Svoboda 2008). That said, the fact that burials are clustered in space and time is likely to reflect important dimensions of UP funerary behaviour (Giacobini 2006b, 2007). This means that particularistic studies are problematic since it remains unclear whether the burials they describe are representative of UP burials as a whole. For instance, the Sungir burials give a very different image of what UP burial practices were like than do the ones

from Baouso da Torre. This is evident in statements that ‘the Upper Paleolithic evidence reveals differences that obviate the need for a comparison between the two [Middle and Upper Paleolithic interments]’ (Gargett 1999: 30), or that ‘Upper Paleolithic burials were not only deliberate, they were also accompanied by sophisticated material and culturally important remains’ (Sayer 2009: 122).

In sum, earlier work on UP burials reveals some tensions between generalist and particularistic approaches to interments. One of the principal unresolved debates centres on whether generalized dimensions of UP culture and behaviour can legitimately be inferred from their mortuary record, or whether burials are best considered as anecdotal evidence about social norms among groups tightly bound in space and time. Our view is that there is something to be gleaned from integrating the results of both scales of analysis, provided that research questions are framed properly.

SAMPLE SELECTION

As discussed above, sample selection in any study of Palaeolithic interments can condition its ultimate outcome, so we explicitly indicate the criteria used to include burials in our sample.

1. Coverage: Temporally, we limit ourselves to the interval 45–10,000 BP, which is generally agreed to correspond to the Upper Palaeolithic *sensu stricto*. Geographically, we restrict our coverage to Eurasia, excluding southeast and southwest Asia. The latter region has a well-defined Upper Palaeolithic sequence, but the absence of Early Upper Palaeolithic (EUP) interments there might skew the pattern, as might its rich record of Late Upper Palaeolithic (LUP) interments, often associated with evidence of early food production (cf. Maher et al. 2011). These factors lead us to exclude the region for the purposes of this analysis.

2. Context: We only include burials that have yielded a fairly complete set of diagnostic human remains in general anatomical connection suggestive of primary contexts in deposits clearly associated with Upper Palaeolithic industries. This means that we disregard the Aurignacian ‘pseudomorphs’ from Cueva Morin (Freeman and Gonzalez Echegaray 1970) and the Final Pleistocene grave from Ushki 6 (Dikov 1968), since neither of these cases has yielded undisputable skeletal evidence. This also means that we exclude isolated well-preserved human remains and concentration of bones that could represent secondary burials or fortuitous associations of human remains with elements often associated with burial. This includes the remains from St-Césaire (Vandermeersch 1993) and Le Marronnier (Onorati and Combier 1995; cf. Henry-Gambier 2008). Excluding the St-Césaire remains (also because of its problematic attribution to the Upper Palaeolithic (Bar-Yosef and Bordes 2010)) also allows us to focus only on *Homo sapiens*, in spite of evidence that Neanderthals inhabited parts of Eurasia until about 28,000 BP (Finlayson et al. 2006).

3. Burials: We consider only interments. There is good evidence that the range of UP mortuary practices was much broader and likely also included secondary interments, relic use, ritual defleshing and/or cannibalism, and the refashioning of body parts into ornaments or vessels (Orschiedt 2002, Martini 2007, Pettitt 2010, Le Mort and Gambier 1991, Gambier and Le Mort 1996, Henry-Gambier and White 2006, White 2007). Our focus on burials is based

largely on the fact that they remain the most abundant class of evidence about UP mortuary practices. Because burials are often associated with archaeological material, they also provide a window into correlations between these two facets of the palaeoanthropological record. Focusing on the materiality of the body and its context allows us to glean insights into the social norms guiding the use of interments as one way to dispose of the dead (Nilsson Stutz 2008).

These criteria led to the identification of a total of 109 burials comprising 151 individuals, which indicates a fairly high incidence of multiple interments. However, only 85 of those burials were retained as truly credible, dropping our sample to 117 individuals (Table 17.1). Given the prevailing idea that Gravettian burials somehow differ qualitatively from more recent ones, we also divided our sample into an ‘early’ (30–20 ky BP) subset of 35 burials and a ‘late’ (20–10 ky BP) subset of 50 burials (Tables 17.1 and 17.2). These numbers of burials translate into 61 individuals for the Early sample and 56 individuals for the Late sample. This indicates that burials containing more than one individual were notably more common in the Early sample.

ANALYSIS

General observations

Geographically, the distribution of our Early and Late samples shows that the latitudinal distribution of burials is comparable across the two samples. In contrast, the longitudinal distribution of Early burials is much greater, extending west-east from Portugal (Lagar Velho) to Siberia (Mal'ta), whereas the Late sample is restricted to France, Germany, and Italy. Figure 17.1 also highlights that only southwest France and the Italian regions of Liguria and Puglia have yielded burials attributed to the two periods. Since most of Italy has yielded Late but not Early burials, this pattern is unlikely simply to be an artefact of regional research histories, a point reinforced by the fact that countries with rich histories of research (e.g. Spain) have yielded no UP burials despite having a rich Mesolithic burial record (Arias et al. 2009).

Figure 17.1 therefore suggests that there was a dramatic contraction of the area in which burial was practised after the end of the Gravettian. The Late sample also becomes considerably denser over the more limited area over which it is distributed, with areas of Western Europe devoid of Early burials looking as though they were somehow ‘backfilled’ by burial-practising populations (e.g. central and northwestern Italy, parts of Germany).

Chronologically, Figure 17.2 shows that burials are present at least at low frequencies for the entire Upper Palaeolithic after the Aurignacian. More noteworthy is the fact that burials are clearly clustered in the Gravettian (c.28–20 ky BP) and the terminal UP (14–10 ky BP). At a continental scale, this echoes the suggestion that a similar clustering can be seen in the Italian record, where very few inhumations date to the c.7,000-year interval separating the clusters (Palma di Cesnola 1993, 2006). The continental trend, however, is very likely driven by the numerical dominance of Italian burials in our sample (Tables 17.1 and 17.2), meaning that this convergence is unlikely to be a coincidence. Based on Figure 17.2, it is warranted to characterize burial as a behaviour documented throughout the Upper Palaeolithic, although

Table 17.1 Upper Palaeolithic burials considered in this study, along with basic contextual information

Early Upper Palaeolithic	Status burial	Age uncal	Period	Site	Plt	Association art	Ochre	Position	Direction (head)	References
Barma Grande 2*	Certain	14,990 ± 80 (Beta-63510/ CMAS-7641)	Gravettian	C	X	X	X	B	E	29, 30, 94, 95, 97.
Barma Grande 3*	Certain	14,990 ± 80 (Beta-63510/ CMAS-7641)	Gravettian	C	X		X	L	E	29, 94, 95, 97.
Barma Grande 4*	Certain	14,990 ± 80 (Beta-63510/ CMAS-7641)	Gravettian	C	X		X	L	E	29, 94, 95, 97.
Barma Grande 5	Certain									
Barma Grande 6	Certain	24,800 ± 800 (OxA-10093)	Gravettian	C	?			L	S	29, 89, 95, 30, 96.
Brno 2	Certain	23,680 ± 200 (OxA-8293)	Pavlovian	O	?		X	NC		1, 16, 73.
Brno 3	Certain		Pavlovian	O	X		X			1.
Cavillon 1	Certain		Gravettian	C			X	L	N	77, 97.
Cro-Magnon 1*	Uncertain		Gravettian	R	?		X	NC		45, 56, 101.
Cro-Magnon 2*	Uncertain	27,680 ± 270 (Beta-157439)	Gravettian	R	?		X	NC		45, 56, 101.
Cro-Magnon 3*	Uncertain	27,680 ± 270 (Beta-157439)	Gravettian	R	?		X	NC		45, 56, 101.
Cro-Magnon 4*	Uncertain	27,680 ± 270 (Beta-157439)	Gravettian	R	?		X	NC		45, 56, 101.
Cro-Magnon 5*	Uncertain	27,680 ± 270 (Beta-157439)	Gravettian	R	?		X	NC		45, 56, 101.

(continued)

Table 17.1 Continued

Early Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Cussac 1	Uncertain	25,120 ± 120 BP (Beta-156643)	Gravettian	C	X		?	NC		5.
Cussac 2	Uncertain	25,120 ± 120 BP (Beta-156643)	Gravettian	C				F		5.
Cussac 3	Uncertain	25,120 ± 120 BP (Beta-156643)	Gravettian	C				NC		5.
Cussac 4	Uncertain	25,120 ± 120 BP (Beta-156643)	Gravettian	C				NC		5.
Cussac 5	Uncertain	25,120 ± 120 BP (Beta-156643)	Gravettian	C				NC		5.
Dolni Vestonice 3	Certain	25,950 ± 630/- 580 (GrN-18189)	Pavlovian	O	X		X	R	N-W	51, 53, 60, 88.
Dolni Vestonice 4	Certain		Pavlovian	O	?		X			1.
Dolni Vestonice 13*	Certain	26,640 ± 110 (GrN-14831) 24,000 ± 900 (ISGS-1616)	Pavlovian	O	X		X	B	S-S-E	54, 86, 88.
Dolni Vestonice 14*	Certain	24,970 ± 920 (ISGS-1617)	Pavlovian	O	X		X	F	S	54, 86, 88.
Dolni Vestonice 15*	Certain	26,640 ± 110 (GrN-14831) 24,000 ± 900 (ISGS-1616)	Pavlovian	O	X		X	B	S	54, 86, 88.

Dolni Vestonice 16	Certain	26,390 ± 270 (ISGS-1744) 25,570 ± 280 (GrN-15276) 25,740 ± 210 (GrN-15277)	Pavlovian	O	X	X	R	E	53, 85, 86, 88, 89.
Grotta delle Arene	Certain	23,440 ± 190 (OxA-10700)	Gravettian	C	X	X	B	S	21, 71.
Candide II Principe	Certain		Gravettian	C	X	X	B		46, 70.
Grotta delle Veneri	Certain		Gravettian	C	X	X	B		46, 70.
a Parabita 1*	Certain		Gravettian	C	X	X	B		46, 70.
a Parabita 2*	Certain		Gravettian	C	X	X	B		46, 70.
Grotta di Baouso da Certain			Gravettian	C	X	X	B	N-W	46, 70.
Torre 1			Gravettian	C	?	X	L	N-W	23, 46, 97.
Grotta di Baouso da Certain			Gravettian	C			F	N-W	15.
Torre 2			Gravettian	C		X	B	S-W	13, 32, 46, 63, 64.
Grotta di Baouso da Certain			Gravettian	C		X	B	S	32, 46, 64.
Torre 3			Gravettian	C		X	B	S-W	70, 97.
Grotta Paglicci 15	Certain	24,720 ± 420 (F-55)	Gravettian	C	X	X	B	S	70, 97.
Grotta Paglicci 25	Certain	23,470 ± 370 (F-57) 23,040 ± 380 (F-58)	Gravettian	C	X	X	B	N-E	70, 97.
Grotte des Enfants 4	Certain		Gravettian	C	X	X	B	N-E	70, 97.
Grotte des Enfants 5*	Certain		Gravettian	C	X	X	B	N-E	70, 97.
Grotte des Enfants 6*	Certain		Gravettian	C	X	X	B	N-E	70, 97.

(continued)

Table 17.1 Continued

Early Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Kostenki 2	Certain	23,880 ± 150 (GIN-7992)	Gravettian	0				S		12, 62, 79, 80.
Kostenki 14	Certain	14,300 ± 460 (GIN-79) 28,370 ± 140 (GrA-15960 29,320 ± 140 (GrA-15955) 30,080 ± 590/-550 (GrN-21802) 31,760 ± 430/-410 (GrA-13288 21,720 ± 570 (LE-1430)	Gravettian	0	X		X	L	W	4, 62, 79, 80.
Kostenki 15	Certain	21,020 ± 180 (OxA-7128) 20,600 ± 140 (GIN-8032)	Gravettian	0	X		?	S		62, 80.
Kostenki 18	Certain	26,580 ± 160 (Poz-1290) 26,520 + 210/-200 (VERA- 3819)	Gravettian	0	X			L	S-W	62, 76, 80.
Krems-Wachtberg 1A*	Certain	26,580 ± 160 (Poz-1290) 26,520 + 210/-200 (VERA- 3819)	Gravettian	0	X		X	L	N	26, 27.
Krems-Wachtberg 1B*	Certain	26,580 ± 160 (Poz-1290) 26,520 + 210/-200 (VERA- 3819)	Gravettian	0	X		X	L	N	26, 27.
Krems-Wachtberg 2	Certain	26,580 ± 160 (Poz-1290) 26,520 + 210/-200 (VERA- 3819)	Gravettian	0	?		X	R	S	26, 27.

Lagar Velho 1	Certain	24,860 ± 200 (GrA-13310)	Gravettian	R	X	X	B	W-N-W	74, 100.
		24,660 ± 260 (OxA-8421)							
		23,920 ± 220 (OxA-8422)							
		24,520 ± 240 (OxA-8423)							
Mal'ta 1*	Certain	19,880 ± 160 (OxA-7129)	Gravettian	O	X	X	L	N	33, 76, 93.
Mal'ta 2*	Certain	19,880 ± 160 (OxA-7129)	Gravettian	O	X	X	L	N	76, 93.
Mladec 1	Uncertain	31,190 + 400/-390 (VERA-3073)	Aurignacian	C	?	?	NC		99, 101.
Mladec 2	Uncertain	31,320 + 410/-390 (VERA-3074)	Aurignacian	C	?	?	NC		99, 101.
Mladec 8	Uncertain	30,680 + 380/-360 (VERA-3075)	Aurignacian	C	?	?	NC		99, 101.
Ostuni 1	Certain	24,410 ± 320 (Gif-9247)	Gravettian	C	X	X	B-L	S	24, 32.
Ostuni 2	Certain	24,410 ± 320 (Gif-9247)	Gravettian	C	?	X	B	S-W	24, 32.

(continued)

Table 17.1 Continued

Early Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Paviland 1	Certain	28,870 ± 180 (OxA-16412) 28,400 ± 320 (OxA-16502) 29,490 ± 210 (OxA-16413) 28,820 ± 340 (OxA-16503) 25,840 ± 280 (OxA-8025) 26,350 ± 550 (OxA-1815)	Gravettian	C	X		X	B	N-E	3, 50.
Pavlov 1	Certain	26,170 ± 450 (GrN-20391)	Gravettian	O	?			R	S	53, 86.
Predmosti 1*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X					52, 53, 67.
Predmosti 2*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X					52, 53, 67.
Predmosti 3*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X				N	52, 53, 67.
Predmosti 4*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X					52, 53, 67.
Predmosti 5*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X					52, 53, 67.
Predmosti 6*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X					52, 53, 67.
Predmosti 7*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	O	X					52, 53, 67.

Predmosti 8*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 9*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 10*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 11*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 12*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 13*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 14*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 15*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 16*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 17*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 18*	Certain	25,820 ± 170 (GrN-1286)	Pavlovian	0	X	52, 53, 67.
Predmosti 22	Uncertain		Gravettian	0	?	67.
Predmosti 27	Certain		Pavlovian	0	?	1
Sungir 1	Certain	22,930 ± 200 (OxA-9036) 19,160 ± 270 (AA-36473)	Gravettian	0	X	N-E B 6, 55, 72.

(continued)

Table 17.1 Continued

Late Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Sungir 2*	Certain	23,830 ± 220 (OxA-9037) 27,210 ± 710 (AA-36474) 26,200 ± 640 (AA-36475)	Gravettian	O	X		X	B	S-W	6, 55, 72.
Sungir 3*	Certain	24,100 ± 240 (OxA-9038) 26,190 ± 640 (AA-36476)	Gravettian	O	X		X	B	N-E	6, 55, 72.
Late Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Abri du Cap Blanc 1	Certain									
Abri Lafaye 1*	Certain	15,290 ± 150 (GifA-95047)	Magdalenian	R	X			L	E	20, 62.
Abri Lafaye 2*	Uncertain	15,290 ± 150 (GifA-95047)	Magdalenian	R	?			R	N-W	18, 48, 49.
Brillenhöhle	Uncertain	12,470 ± 65 (OxA-11054)	Magdalenian	C				NC		18, 42, 48.
Chancelade 1	Certain									
Duruthy 1	Uncertain		Magdalenian	C	?		X	L		39, 42.
Duruthy 2	Uncertain		Final Magdalenian	C				NC		42, 57.
Gough's C 1	Uncertain	9,080 ± 150 (BM-525) 9,100 ± 100 (OxA-814)	Magdalenian	C	?			NC		42, 57.
(Cheddar Man)			Creswellian	C	?					78, 84.
Grotta Continenza ?	Uncertain	9,680 ± 110 (Rome-556)	Final	R			?			35, 36.
Grotta Continenza ?	Uncertain	9,885 ± 75 (Rome-1196)	Epigravettian	R			?	NC		35, 36.

Grotta Continenza ? Uncertain	10,280 ± 110 (Rome-557)	Final Epigravettian	R		X	L	N	35, 36.
Grotta Continenza 7 Certain	10,230 ± 100 (Rome-558)	Epigravettian	R		X	F	S-E	32, 35, 36.
Grotta del Romito 1* Certain	11,380 ± 70 (Beta-160297)	Epigravettian	R	X	X	B	N-W	28, 59.
Grotta del Romito 2* Certain	11,340 ± 90 (LTL-3032A)	Epigravettian	R	X	X	B	N-W	28, 59.
Grotta del Romito 3 Certain	11,380 ± 70 (Beta-160297)	Epigravettian	C	X		B	N-W	28, 59.
Grotta del Romito 4 Certain	11,380 ± 70 (Beta-160297)	Epigravettian	C	X		B	N-W	28, 59.
Grotta del Romito 5* Certain	11,340 ± 90 (LTL-3032A)	Epigravettian	R	X	X	B	N-W	25, 28, 59.
Grotta del Romito 6* Certain	10,862 ± 70 (LTL-3033A)	Epigravettian	R	X	X	B	N-W	25, 28, 59.
Grotta del Romito 7 Certain	12,060 ± 90 (Beta-160302)	Epigravettian	C	X	X	B	N-W	59.
Grotta del Romito 8 Certain	13,915 ± 70 (LTL-3034A)	Epigravettian	C	X	?	B	N-W	59.
Grotta del Romito 9 Certain	11,420 ± 100 (Beta-142778)	Epigravettian	C	?	X	B	N-W	25.
Grotta della Mura 1 Certain		Epigravettian	C			B	N-W	19.
Grotta delle Arene Candide 1		Epigravettian	C	?	?	NC		22, 31.
(continued)								

Table 17.1 Continued

Late Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Grotta delle Arene Candide 2	Certain		Epigravettian	C	X		X	B	S-E	22, 46.
Grotta delle Arene Candide 3	Certain	10,065 ± 55 (OxA-10998)	Epigravettian	C	?			NC		22, 31.
Grotta delle Arene Candide 4	Certain		Epigravettian	C	?		?	NC		22, 31.
Grotta delle Arene Candide 5A*	Certain	9,925 ± 50 (OxA-10999)	Epigravettian	C	X		X	B	E	22, 46.
Grotta delle Arene Candide 5B*	Certain	9,925 ± 50 (OxA-10999)	Epigravettian	C	X		X	B	E	22, 46.
Grotta delle Arene Candide 6A*	Certain	10,585 ± 55 (OxA-11000)	Epigravettian	C	X		X	B		22, 46.
Grotta delle Arene Candide 6B*	Certain	10,585 ± 55 (OxA-11000)	Epigravettian	C	X		X	B		22, 46.
Grotta delle Arene Candide 7	Certain		Epigravettian	C	X			B	Axis SE-NO	22, 46.
Grotta delle Arene Candide 8	Certain	10,655 ± 55 (OxA-11001)	Epigravettian	C	X		X	B	S-W	22, 46.
Grotta delle Arene Candide 9	Certain		Epigravettian	C	X		X	B		22, 46.
Grotta delle Arene Candide 10	Certain		Epigravettian	C	X		X	B	N-W	22, 46.
Grotta delle Arene Candide 11	Certain		Epigravettian	C	X		X	B	N-W	22, 46.
Grotta delle Arene Candide 12	Certain	10,720 ± 55 (OxA-11002)	Epigravettian	C	?		?	NC		22, 31.
Grotta delle Arene Candide 13	Certain		Epigravettian	C	?		?	NC		22, 31.

Grotta delle Arene Candide 14	Certain	10,735 ± 55 (OxA-11003)	Epigravettian	C	?	?	NC	22, 31.
Grotta delle Arene Candide 15	Certain		Epigravettian	C	X	X	B	22, 46.
Grotta di San Teodoro 1	Certain		Epigravettian	C	X	X	L	34, 61.
Grotta di San Teodoro 2	Certain		Epigravettian	C	X	X	B	34, 61.
Grotta di San Teodoro 3	Certain		Epigravettian	C	?	X	NC	61.
Grotta di San Teodoro 4	Certain		Epigravettian	C	X	X	B	10, 34, 61.
Grotta di San Teodoro 5	Uncertain		Epigravettian	C			NC	34.
Grotta di San Teodoro 6	Certain		Epigravettian	C	?	?	NC	2.
Grotta di San Teodoro 7	Certain		Epigravettian	C	?	X	NC	2.
Grotta d'Oriente A	Uncertain		Epigravettian	C	X	X	NC	58.
Grotta d'Oriente C	Certain		Epigravettian	C	X	X	B	58.
Grotta Maritza 1	Certain		Epigravettian	C			B	37, 46.
Grotta Maritza 2	Certain		Epigravettian	C			NC	13, 32.
Grotta Romanelli 1	Certain		Epigravettian	C	?	?	B	81.
Grotta Romanelli 2	Certain		Epigravettian	C	?	?		81.
Grotta Romanelli 3	Certain		Epigravettian	C	?	?		81.
Grotte des Enfants 1*	Certain	11,130 ± 100 (GifA-94197)	Epigravettian	C	?	?	B	N-E 43, 44, 70.
Grotte des Enfants 2*	Certain	11,130 ± 100 (GifA-94197)	Epigravettian	C	?	?	B	N-E 43, 44, 70.

(continued)

Table 17.1 Continued

Late Upper Palaeolithic	Status burial	Age uncal	Period	Site	Pit	Association art	Ochre	Position	Direction (head)	References
Grotte des Enfants 3 La Madeleine 4	Certain Certain	10,190 ± 100 (GifA-95457)	Epigravettian Magdalenian	C R	X		X	B B	S-W S	46, 70, 97, 41, 91.
Laugerie-Basse 4	Uncertain	15,700 ± 150 (GifA-94204)	Magdalenian	R				L	N-E	38, 48, 66.
Les Hoteaux Mittlere Klausse 1	Certain Certain	18,200 ± 200 (UCLA-1869) 18,590 ± 260 (OxA-9856)	Magdalenian Solutrean	R C			X X	B B		87, 90. 9, 62, 75, 83.
Neuwied-Irlich ?	Uncertain	11,910 ± 70 (OxA-9847) 12,310 ± 120 (OxA-9736)	Magdalenian	O	?		?			82.
Neuwied-Irlich ?	Uncertain	12,110 ± 90 (UtC-9221) 11,965 ± 65 (OxA-9848)	Magdalenian	O	?		?			82.
Oberkassel 1*	Certain	11,570 ± 100 (OxA-4790)	Magdalenian	O	?		X			40, 62.
Oberkassel 2*	Certain	12,180 ± 110 (OxA-4792)	Magdalenian	O	?		X			40, 62.
Riparo Tagliente 1	Certain	13,270 ± 170 (OxA-3532) 13,070 ± 170 (OxA-3531)	Epigravettian	R	X	X	?	B	N-E	7, 17, 32.
Riparo Villabruna 1	Certain	12,140 ± 70 (KIA-27004) 12,040 ± 150 (R-2023)	Epigravettian	R	X	X	X	B	N-E	17.

Rond-du-Barry 8	Uncertain	17,100 ± 450 (Gif-3038)	Final Magdalenian C				8.
Saint-Germain-la-Rivière 1	Uncertain		Magdalenian	R	?		92.
Saint-Germain-la-Rivière 2	Certain	15,780 ± 200 (GifA-95456)	Magdalenian	R	?	X	11, 48, 91.
Vado all'Arancio 1	Certain	11,330 ± 50 (R-1333)	Epigravettian	C	X		32, 46, 65.
Vado all'Arancio 2	Certain	11,330 ± 50 (R-1333)	Epigravettian	C		B	32, 46, 65.

Notes: * Multiple burials. Key for radiocarbon dates: Bold: direct dates; Italic: unreliable dates. Key for site: C: Cave; R: Rockshelter; O: Open air site. Key for position: B: Back; L: Left side; R: Right side; F: Front; S: Sitting; NC: Not in anatomical connection. Reference key: 1: Absolon 1929; 2: Aymar and Giacobini 1989; 3: Aldhouse-Green and Pettitt 1998; 4: Anikovich 1992; 5: Aujoulat et al. 2002; 6: Bader 1964; 7: Bartolomei et al. 1974; 8: de Bayle des Hermens and Heim 1989; 9: Bednarik 2009; 10: Binant 1991; 11: Blanchard et al. 1972; 12: Boriskovski 1965; 13: Borgognini Tarli 1969; 14: Borgognini Tarli et al. 1980; 15: Boyle 1925; 16: Breuil 1924; 17: Broglio 1995; 18: Brun 1867; 19: Calattini 2002; 20: Capitan and Peyrony 1912; 21: Cardini 1942; 22: Cardini 1980; 23: Carthailac 1912; 24: Coppola and Vacca 1995; 25: Craig et al. 2010; 26: Einwögerer et al. 2006; 27: Einwögerer et al. 2009; 28: Fabbri et al. 1989; 29: Formicola 1989; 30: Formicola et al. 2004; 31: Formicola et al. 2005; 32: Giacobini 2006a; 33: Golomshtok 1933; 34: Graziosi 1947; 35: Grifoni Cremonesi 1998; 36: Grifoni Cremonesi et al. 1995; 37: Grifoni Cremonesi and Radmilli 1964; 38: Hamy 1874; 39: Hardy 1891; 40: Hedges et al. 1998; 41: Heim 1991; 42: Henry-Gambier 1990; 43: Henry-Gambier 1995; 44: Henry-Gambier 2001; 45: Henry-Gambier 2002; 46: Henry-Gambier 2005; 47: Henry-Gambier 2008; 48: Henry-Gambier et al. 2000; 49: Holt and Formicola 2008; 50: Jacobi and Higham 2008; 51: Jelinek 1953; 52: Jelinek 1989; 53: Jelinek 1991; 54: Klima 1988; 55: Kuzmin et al. 2004; 56: Lartet 1868; 57: Lartet and Chaplain-Duparc 1874; 58: Lo Vetro and Martini 2006; 59: Martini 2006; 60: Mauduit 1949; 61: Maviglia 1941; 62: May 1986; 63: Mezzena and Palma di Cesnola 1972; 64: Mezzena and Palma di Cesnola 1993; 65: Minellono 1980; 66: de Mortillet 1872; 67: Obermaier 1905; 68: Onorati and Combier 1995; 69: Orschiedt 2002; 70: Palma di Cesnola 2001; 71: Pettitt et al. 2003; 72: Pettitt and Bader 2000; 73: Pettitt and Trinkaus 2000; 74: Pettitt et al. 2002; 75: Protsch and Glowatzki 1974; 76: Richards et al. 2001; 77: Rivière 1872; 78: Seligman and Parsons 1914; 79: Sinitsyn and Hoffecker 2006; 80: Soffer 1985; 81: Stasi and Regalia 1904; 82: Street et al. 2006; 83: Street and Terberger 2002; 84: Stringer 2000; 85: Svoboda 1988; 86: Svoboda et al. 2002; 87: Tournier and Guillon 1895; 88: Trinkaus and Jelinek 1997; 89: Trinkaus and Svoboda 2006; 90: Vallois 1972; 91: Vanhaeren and d'Errico 2001; 92: Vanhaeren and d'Errico 2003; 93: Vasil'ev 2000; 94: Verneau 1892; 95: Verneau 1894; 96: Verneau 1899; 97: Verneau 1906; 98: Veyrier et al. 1953; 99: Wild et al. 2005; 100: Zilhão and Almeida 2002; 101: Zilhão and Trinkaus 2002.

Table 17.2 Demographic and artefactual information for the Upper Palaeolithic burials considered in this study

Early Upper Palaeolithic	Age	Sex	Association tools	Association fauna	Other grave goods	Ornaments	References
Barma Grande 2*	Adult	Male	X			X	10, 17, 24, 25, 76, 79.
Barma Grande 3*	Teen	?	X	X		X	10, 17, 24, 25, 76, 77, 79.
Barma Grande 4*	Teen	?	X			X	10, 17, 24, 25, 76, 77, 79.
Barma Grande 5	Adult	Male			X	X	25, 77.
Barma Grande 6	Adult	Male				X	25, 28.
Brno 2	Adult	Male	X	X	X	X	1, 11, 45.
Brno 3	Adult	Female					1.
Cavillon 1	Adult	?	X	X		X	59, 61, 78.
Dolní Vestonice 3	Adult	Female	X	X		?	43, 45, 50.
Dolní Vestonice 4	Child	?		X		X	1, 45.
Dolní Vestonice 13*	Adult	Male				X	45, 46, 47, 68.
Dolní Vestonice 14*	Adult	Male				X	40, 45, 46, 47, 68.
Dolní Vestonice 15*	Adult	?				X	26, 27, 45, 46, 47, 68, 70.
Dolní Vestonice 16	Adult	Male				X	45, 67.
Grotta delle Arene Candide II	Teen	Male	X	X		X	15, 31, 85.
Principe							
Grotta delle Veneri a Parabita 1*	Adult	Male	X			X	29, 30, 59.
Grotta delle Veneri a Parabita 2*	Adult	?	X		X	X	29, 30, 59, 60.
Grotta di Baouso da Torre 1	Adult	Male	X	X	X	X	10, 39, 52, 62, 81.
Grotta di Baouso da Torre 2	Adult	Male	X	X		X	10, 17, 39.
Grotta di Baouso da Torre 3	Teen	?					10, 81.
Grotta Paglicci 15	Teen	?	X		X	X	29, 39, 53.
Grotta Paglicci 25	Adult	Female	X			X	29, 39, 54.
Grotte des Enfants 4	Adult	Male	?	?	?	X	59.
Grotte des Enfants 5*	Adult	Female	X		X	X	59, 78, 79.

	Teen	Male	X	X	59, 79. 52, 65.
Grotte des Enfants 6*	Adult	Male		X	
Kostenki 2	Adult	Male		X	
Kostenki 14	Adult	Male			4, 52, 65.
Kostenki 15	Child	?			4, 52, 65.
Kostenki 18	Child	?	X		52, 65.
Krems-Wachtberg 1A*	Baby	?		X	20.
Krems-Wachtberg 1B*	Baby	?			20.
Krems-Wachtberg 2	Baby	?		X	20, 21.
Lagar Velho 1	Child	?			56, 73, 84.
Mal'ta 1*	Child	?	X		32.
Mal'ta 2*	Child	?	X		75.
Ostuni 1	Adult	Female	X		18, 29, 60.
Ostuni 2	Adult	?	X		18, 29, 38.
Paviland 1	Adult	Male		X	3, 42.
Pavlov 1	Adult	Male			45.
Predmosti 1*	Adult	?	X		43, 56, 84.
Predmosti 2*	Child	?	X		44, 57, 85.
Predmosti 3*	Adult	?	X		44, 57, 85.
Predmosti 4*	Adult	?	X		44, 57, 85.
Predmosti 5*	Adult	?	X		44, 57, 85.
Predmosti 6*	Baby	?	X		44, 57, 85.
Predmosti 7*	Teen	?	X		44, 57, 85.
Predmosti 8*	Child	?	X		44, 57, 85.
Predmosti 9*	Adult	?	X		44, 57, 85.
Predmosti 10*	Adult	?	X		44, 57, 85.
Predmosti 11*	Baby	?	X		44, 57, 85.
Predmosti 12*	Baby	?	X		44, 57, 85.
Predmosti 13*	Baby	?	X		44, 57, 85.
Predmosti 14*	Adult	?	X		44, 57, 85.
Predmosti 15*	Child	?	X		44, 57, 85.

(continued)

Table 17.2 Continued

Early Upper Palaeolithic	Age	Sex	Association tools	Association fauna	Other grave goods	Ornaments	References
Predmosti 16*	Child	?		X			44, 57, 85.
Predmosti 17*	Child	?		X			44, 57, 85.
Predmosti 18*	Adult	?		X			44, 57, 85.
Predmosti 27	Adult	?		X			1, 85.
Sungir 1	Adult	Male	X		X	X	5, 82.
Sungir 2*	Teen	Male	X		X	X	51, 82, 83.
Sungir 3*	Child	?	X		X	X	51, 82, 83.
Late Upper Palaeolithic							
Abri du Cap Blanc 1	Adult	Female					References
Abri Lafaye 1*	Adult	Female	X	X			41.
Chancelade 1	Adult	Male					13, 41.
Grotta Continenza 7	Adult	Male	?	X	X	X	41.
Grotta del Romito 1*	Adult	Female		X			29, 30, 34.
Grotta del Romito 2*	Teen	?		X			19, 23, 49.
Grotta del Romito 3	Adult	Male	X			?	19, 23, 49.
Grotta del Romito 4	Adult	Female				?	19, 23, 49.
Grotta del Romito 5*	Adult	Female	?	?	X	?	19, 23, 49.
Grotta del Romito 6*	Adult	Male	?	?	X	?	19, 23, 49.
Grotta del Romito 7	Adult	Male	X				19, 49.
Grotta del Romito 8	Adult	Male			?		19, 49.
Grotta del Romito 9	Adult	?	?	?	?	X	19, 63.
Grotta della Mura 1	Child	?					14.
Grotta delle Arene Candide 1	Adult	Male					16.
Grotta delle Arene Candide 2	Adult	?			X	X	16, 39.
Grotta delle Arene Candide 3	Adult	Female					16.
Grotta delle Arene Candide 4	Adult	Male	X		X	X	16.
Grotta delle Arene Candide 5A*	Adult	Male	X	X	X	X	16, 39.

Grotta delle Arene Candide 5B*	Child	?	X	X	X	16, 39.
Grotta delle Arene Candide 6A*	Adult	?				16, 39.
Grotta delle Arene Candide 6B*	Child	?				16, 39.
Grotta delle Arene Candide 7	Baby	?			X	16, 39.
Grotta delle Arene Candide 8	Child	?	X		X	16, 39.
Grotta delle Arene Candide 9	Baby	?	X		X	16, 39.
Grotta delle Arene Candide 10	Adult	Male	X		X	16, 39.
Grotta delle Arene Candide 11	Child	?	X		X	16, 39.
Grotta delle Arene Candide 12	Adult	Male	?		?	16.
Grotta delle Arene Candide 13	Teen	Female	?		?	16.
Grotta delle Arene Candide 14	Adult	Female	?		?	16.
Grotta delle Arene Candide 15	Teen	?	X		X	16, 39.
Grotta di San Teodoro 1	Adult	Female			X	22, 33, 51.
Grotta di San Teodoro 2	Adult	?	?		?	51.
Grotta di San Teodoro 3	Adult	?	?		?	51.
Grotta di San Teodoro 4	Adult	Female	X		?	7, 22, 33, 51.
Grotta di San Teodoro 6	Adult	?	?		?	2.
Grotta di San Teodoro 7	Adult	Male	?		?	2.
Grotta d'Oriente C	Adult	?	X		?	48.
Grotta Maritza 1	Child	?	X			29, 30, 35, 39.
Grotta Maritza 2	Adult	Male				9, 29, 30, 39.
Grotta Romanelli 1	Adult	Male	X		?	66.
Grotta Romanelli 2	Child	?	X		?	66.
Grotta Romanelli 3	Child	?	X		?	66.
Grotte des Enfants 1*	Child	?			X	37, 38, 59.

(continued)

Table 17.2 Continued

Late Upper Palaeolithic	Age	Sex	Association tools	Association fauna	Other grave goods	Ornaments	References
Grotte des Enfants 2*	Child	?				X	37, 38, 59.
Grotte des Enfants 3	Adult	Female	?	?	X	?	59.
La Madeleine 4	Child	?				X	36, 72.
Les Hoteaux	Teen	?			X	X	69, 71.
Mittlere Klause 1	Adult	Male		X			41.
Oberkassel 1*	Adult	Male		X	X		7, 41.
Oberkassel 2*	Adult	Female		X	X		7, 41.
Riparo Tagliente 1	Adult	Male		X	X	?	6, 12.
Riparo Villabruna 1	Adult	Male	X		X		12.
Saint-Germain-la-Rivière 2	Adult	Female	X	?		X	8, 41, 74.
Vado all'Arancio 1	Adult	Male	?	?	?	X	29, 39.
Vado all'Arancio 2	Child	?				?	29, 39, 55.

Notes: Reference key: 1: Absolon 1929; 2: Aymar and Giacobini 1989; 3: Aldhouse-Green 2000; 4: Anikovich 1992; 5: Bader 1964; 6: Bartolomei et al. 1974; 7: Binant 1991; 8: Blanchard et al. 1972; 9: Borgognini 1969; 10: Boyle 1925; 11: Breuil 1924; 12: Broglio 1995; 13: Brun 1867; 14: Calattini 2002; 15: Cardini 1942; 16: Cardini 1980; 17: Carthallac 1912; 18: Coppola and Vacca 1995; 19: Craig et al. 2010; 20: Einwögerer et al. 2006; 21: Einwögerer et al. 2009; 22: Fabbri 1993; 23: Fabbri et al. 1989; 24: Formicola 1988; 25: Formicola 1989; 26: Formicola 2007; 27: Formicola et al. 2001; 28: Formicola et al. 2004; 29: Giacobini 2006a; 30: Giacobini 2006b; 31: Giacobini and Malerba 1992; 32: Golomshtok 1933; 33: Graziosi 1947; 34: Grifoni et al. 1995; 35: Grifoni and Radmili 1964; 36: Heim 1991; 37: Henry-Gambier 1995; 38: Henry-Gambier 2001; 39: Henry-Gambier 2005; 40: Hillson et al. 2006; 41: Holt and Formicola 2008; 42: Jacobi and Highham 2008; 43: Jelinek 1953; 44: Jelinek 1989; 45: Jelinek 1991; 46: Klima 1987; 47: Klima 1988; 48: Lo Vetro and Martini 2006; 49: Martini 2006; 50: Mauduit 1949; 51: Maviglia 1941; 52: May 1986; 53: Mezzena and Palma di Cesnola 1972; 54: Mezzena and Palma di Cesnola 1993; 55: Minellono 1980; 56: Moreno-Garcia 2002; 57: Obermaier 1905; 58: Onorati and Comber 1995; 59: Palma di Cesnola 2001; 60: Palma di Cesnola 2006; 61: Rivière 1872; 62: Rivière 1873; 63: Ruffo 2010; 64: Slimak and Plisson 2008; 65: Soffer 1985; 66: Stasi and Regalia 1904; 67: Svoboda 1988; 68: Trinkaus and Svoboda 2006; 69: Tournier and Guillon 1895; 70: Ullrich 1995; 71: Vallois 1972; 72: Vanhaeren and d'Errico 2001; 73: Vanhaeren and d'Errico 2002; 74: Vanhaeren and d'Errico 2003; 75: Vasil'ev 2000; 76: Verneau 1892; 77: Verneau 1899; 78: Verneau 1906; 79: Verneau 1908; 80: Veyrier et al. 1953; 81: Villotte and Henry-Gambier 2010; 82: White 1993; 83: White 1999; 84: Zilhão and Almeida 2002; 85: Zilhão and Trinkaus 2002.

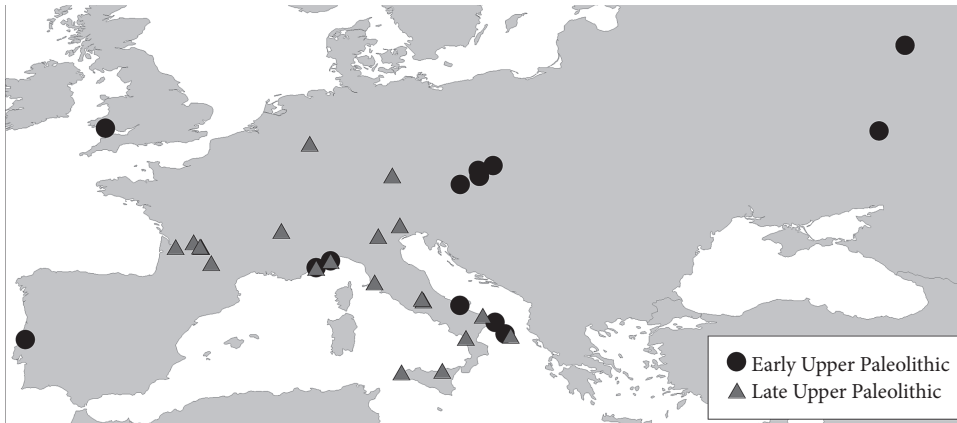


FIG. 17.1 Distribution of early (circles) and late Upper Palaeolithic (triangles) burials in Eurasia

its conspicuous absence during the Aurignacian requires explanation by proponents of the 'human revolution' model (Mellars 2005).

The variation in the graphs that comprise Figure 17.2 also reveals that the term 'burial' can be somewhat vague. Comparing the total number of buried individuals (Fig. 17.2(a) as opposed to the number of sites with burials (Fig. 17.2(b)) shows that many sites have yielded more than a single burial. Although not graphed, the total number of inhumations (i.e. individual graves) also results in a slightly different pattern. It is therefore important to highlight what is meant by the term 'burial' in any given context, as different figures can tell us different things about Upper Palaeolithic mortuary practices.

We have already mentioned that the number of interments show two peaks, the main one during the 31,250–28,750 cal. BP interval, and a slightly more modest one between 13,750–11,250 cal. BP.¹ They are separated by over 15,000 calendar years which suggests the pattern is not simply an artefact of time-vectored differential preservation where we would expect to see a continuous increase in the frequency of burials as we move towards the present (Surovell and Brantingham 2007, Surovell et al. 2009). While the absence of corroborating palaeontological and geological data prevents us from ascertaining this (cf. Surovell et al. 2009), some very unusual preservation biases would have had to be at play to exclude human intentionality as the driving factor.

The fact that both graphs show that sites containing burials and especially the number of buried individuals are highest in the Gravettian suggests that burial was an important facet of social life at that time. Combined with the geographical extent of EUP burials seen in Figure 17.1, one might even be tempted to argue that burials represent a common cultural feature of a far-flung population sharing certain social norms (Mussi et al. 2000).

Some interesting discrepancies emerge when the graphs are compared, however. First, it is obvious that the number of sites containing burials severely underestimates the number of buried individuals. This simply reflects the fact that burial sites often contain

¹ Unless otherwise mentioned, all calibrated dates used in this chapter were obtained using OxCal 4.01 IntCal09.

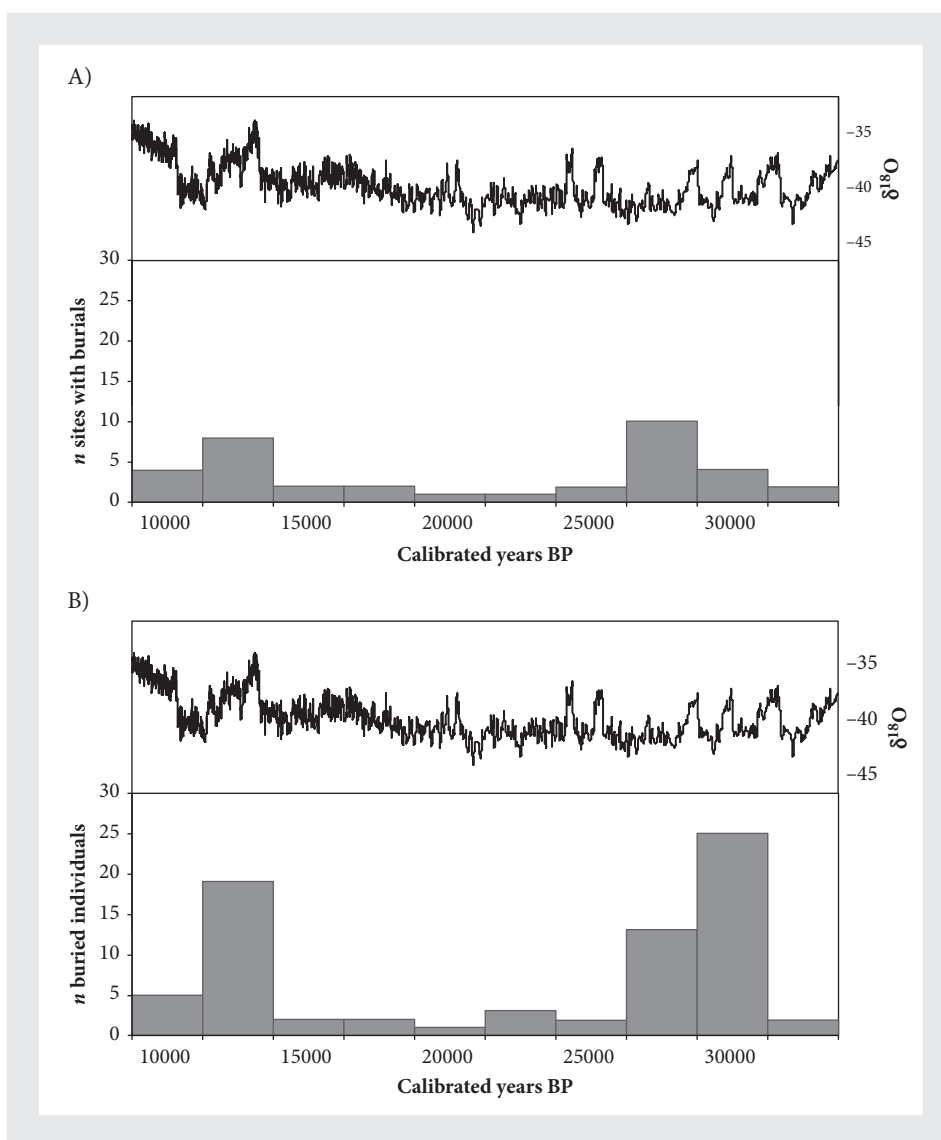


FIG. 17.2 Distribution of burials over time

Notes: (a) Number of sites containing burials; (b) number of buried individuals.

more than a single buried individual. That said, the two figures do not co-vary directly. Most obviously, the Gravettian is associated with many more buried individuals than the Final Epigravettian, even though the number of early Gravettian burial sites is much smaller. This indicates that multiple inhumations were more common in the Gravettian than at the tail-end of the Palaeolithic, which may reflect changing views of personhood and social relations as the Pleistocene was drawing to a close. The presence of these peaks does, however, indicate that burial acquired greater prominence as a way to underscore some of these norms.

Some scholars have argued that the incidence of UP symbolic behaviour, especially parietal and mobiliary art, was strongly related to climatic variability (Barton et al. 1994). In this view, symbolic behaviour acted as a ‘social lubricant’ to facilitate interactions between people as they aggregated in refugia during the Last Glacial Maximum (Gamble 1986, 1999).

Since UP burials are usually agreed to be eminently symbolic in nature, a first step to explain the peaks seen in Figure 17.2 would be to address this possibility. However, regressions between the number of buried individuals and burial sites and variance in climatic conditions show only statistically insignificant relationships² (climate data drawn from the GRIP Ice Core; Blunier and Brook 2001). This allows us to rule out ‘symbolic lubrication’ as an explanation for the changing incidence in burials over the course of the UP, in notable contrast to Palaeolithic art.

In a way, this is completely unsurprising. After all, not all symbolic behaviours are the same, and while parietal and mobiliary art was meant to publically broadcast social cues, burials are starkly different in terms of their long-term visibility. On the one hand, depictions could remain visible for millennia and, in the case of mobiliary art, they could also be moved considerable distances. On the other, burials were inextricably associated with very specific places and they were visible and recognizable for comparatively short periods of time. In a way, burials can even be considered the ‘anti-Palaeolithic art’ since they were probably created and socially ‘consumed’ over comparatively short periods of time, dictated as much by the need to dispose of bodies in short order as by the fact that their static nature would have been at odds with the inherent mobility of Late Pleistocene hunter-gatherers. Lastly, to the extent that an UP grave would/could have stayed visible for more than a generation, the direct knowledge of a buried individual’s identity and/or personal familiarity with him or her would have rapidly disappeared from the collective memory that is essential to give that grave its full meaning.

In fact, it is very rare to find burials associated with parietal art, and only 12.5% of LUP graves may have been. This is in contrast to mobiliary art, which is fairly frequent in the burial context and would have disappeared from the public domain following burial. This reinforces the patterns discussed earlier, and then suggests that, as in contrast to Palaeolithic art, one might even *expect* there to be a disconnect between climatic variability and burial frequency. This therefore forces a revision of positions that interpret variation in the complexity and frequency of burials in the Upper Palaeolithic as largely a response to climatic pressures (Riel-Salvatore 2001).

Demographic Trends

We begin this section with a perfunctory analysis of the age and sex profiles of buried individuals in both periods to evaluate whether the conclusions of earlier studies are borne out with our more complete data set. In terms of sex, individuals for whom a determination is available indicate a 3.6 (18:5) male-to-female ratio in the EUP, compared with only 1.46 (19:13)

² The statistics for the regressions between number of ‘burials’ and variance in temperature are as follow: for individuals, $r = 0.20$, $p = 0.55$; and for sites, $r = 0.21$, $p = 0.53$. Running comparable regressions for the EUP and LUP samples independently yields similarly statistically insignificant relationships.

in the LUP. This confirms the view that females were almost as likely to be buried as males in the LUP, but almost three times less so in the EUP.

Turning to age, the individuals were categorized as infants (0–2 years), juveniles (2–12 years), teens (12–18 years), and adults (18+ years). While the EUP and LUP samples contain comparable numbers of individuals, they show some clear differences. Although it is clear that adults were buried more often than other age groups, a more thorough inspection reveals that non-adults are much more frequent in the EUP than in the LUP (45% vs 32%, respectively). If the Predmosti data are excluded (due to their unusual accumulation history), non-adults account for almost half (48.9%) of all EUP interred individuals. Most strikingly, however, the adult-to-infant ratio in the EUP is 4.27 (or 8, if Predmosti is excluded), while in the LUP the ratio is of 19 adults for every infant, a dramatic difference indeed.

Proportionally, many more infants were buried in the EUP than in the LUP. The meaning of this pattern needs to be contextualized. Before stating that infants were only very rarely *selected* for burial in the LUP, other potential explanations for a lack of deceased infants must be first be ruled out. For instance, while several authors have noted that Mousterian burials include proportionally many more infants than Gravettian burials, what this means continues to be debated (Riel-Salvatore and Clark 2001, Zilhão and Trinkaus 2002, Zilhão 2005). Some see this difference as indicating a difference in the age at which an individual was considered a person and, therefore, an integral part of the social group (Zilhão 2005). On the other hand, we tend to see the discrepancy in dead infants between the two periods as most likely to result from decreased infant mortality in the Gravettian as a result of a greater dependence on plant foods and small game (Riel-Salvatore 2010). At the risk of sounding gruesome, our view is that you can't bury dead babies if you don't have dead babies to bury in the first place. Considering the increased reliance on plants and small game in the LUP relative to the EUP (e.g. Stiner and Kuhn 2006), we feel that this more prosaic perspective is a more parsimonious explanation for the difference in infant-to-adult ratios in the burials of the two periods.

Of course, other interpretations of the high frequency of infants in the EUP record cannot be dismissed out of hand. Their relevance needs to be evaluated against the record, however. In other words, while it is certainly possible that EUP infants entered the burial record as part of rites reflecting infanticide or concerns about purification etc., we prefer for the moment to remain wary of inferring too much about such considerations in the absence of solid supporting data. After all, it is also possible that their prevalence reflects situational decisions that bear little to no resemblance to ethnographically documented practices, even if we could feel safe in reconstructing social norms on such a small, patchily distributed, and heterogeneous sample of interments. Thus, at this time, taking a materialist perspective on the issue seems to be the safest starting point for a critical evaluation of that unquestionably distinctive facet of the EUP mortuary record.

That said, regardless of the ultimate explanation for the low number of infants in our sample, the fact that they were at least occasionally buried in both periods does indicate that the death of a young child would have been traumatic enough to some Palaeolithic societies to warrant burying them, much like older members of their societies. The fact that, in most cases (except Predmosti for which details are sadly lacking), UP infants were buried with ornaments suggests to us that they were definitely considered to be, if not members of the societies into which they were born (discussed later), at least socially important enough for parents to feel the need to mark their loss with such socially significant objects.

Burial Context

Multiple burials are found in both periods. But while the EUP is associated with 26 individual as opposed to 8 multiple burials, the LUP is associated with 43 individual and only 7 multiple burials. This dimension again indicates a very clear distinction between the two periods, with multiple burials being relatively twice as common in the EUP. As for the age and sex patterns discussed above, this can't be explained as a result of differential survival. It therefore is possible that the prevalence of multiple burials in the EUP reflects significant differences in the social norms that structured burial practices between the early and later phases of the Upper Palaeolithic.

Formicola (2007) has cogently argued that multiple deaths are unlikely to have been common enough in the UP for these occurrences to be completely natural. This means either that specific people were put to death to accompany some deceased individuals, or that burials 'lived' in the collective social mind long enough for individuals to be buried alongside already dead relatives, however defined. *Anthropologie de terrain* has much to offer to resolve some of these questions (Duday et al. 1990). However, since fine-grained contextual information is lacking for most UP burials, it is currently hard if not impossible adequately to address this question. Nonetheless, the preponderance of pathological individuals (and perhaps juveniles) included in many multiple burials and also noted by Formicola (2007) needs to be accounted for in any future consideration of multiple UP burials.

As concerns the context of UP burials, our sample indicates that 49/61 EUP and 28/56 LUP buried individuals are associated with evidence of a burial pit. Given the standards of documentation at the time most burials were found, it is likely that some of this evidence has been inferred indirectly from the inclusion of multiple individuals within a single grave. This is especially true for the Predmosti mass grave.

As for the type of sites in which burials were found, 42/61 of EUP individuals were found in open-air contexts (23/42 if Predmosti is excluded), compared to only 4/56 in the LUP. While this might appear to be a significant and behaviourally meaningful difference, in reality, it is a reflection of the geology of the different regions in which EUP and LUP interments are concentrated. For example, EUP open-air burials come mainly from Moravia and the Russian Plain, where extensive karstic systems are rare or non-existent. In contrast, LUP burials are concentrated in Italy and France, where caves and rockshelters are common. However, Italy also comprises a large number of open-air UP sites (Palma di Cesnola 1993). This suggests that, where caves exist, sepulchral activity may have been concentrated preferentially in those settings. As a result, it is impossible to attribute any significance to the differences in site-setting preference between the two phases of the UP. If anything, the high frequency of open-air EUP burial sites raises the question of why Moravia and the Russian Plain have not yielded any LUP burials.

Grave Goods: Ochre, Ornaments, and Other Things

The presence of ochre and grave goods is often argued to be a diagnostic feature of UP burials. Our sample vindicates this, though they are less frequent in the LUP. Given how difficult it can be to attribute ornaments to individuals in multiple interments, for this section we use inhumations as our unit of analysis. Ornaments are present in 25/35 (~71%) of EUP burials and 16/50 (~32%) of LUP burials, while ochre is associated with 26/35 (~74%) of EUP burials

and 25/50 (~50%) of LUP burials. Thus, ornaments and ochre are notably more frequent in the EUP than in the LUP, even if they are not present in all EUP burials. This means that equating UP burials with lots of ochre and ornaments is an overstatement of the evidence, especially for the LUP. Even in the EUP, Table 17.1 indicates that burials from a single site can be extremely variable in terms of their association with ochre and ornaments.

Turning to the symbolic nature of these grave goods, while ochre can be fairly securely associated with mortuary ritual, whether ornaments are *de facto* grave goods has never been demonstrated. In other words, while some the ornaments associated with some UP burials (specifically the ones from Sungir) likely represent grave goods, it also is possible that many ornaments found in graves were actually worn in daily life rather than being offerings manufactured specifically for the deceased. Ornaments can still be meaningful grave inclusions even if they do not represent grave goods *per se*, for instance if they were meant to be taken out of social circulation from the society in which they were worn in life. Determining this, however, requires an assessment of whether they were used as ornaments during the life of a buried individual.

Ornaments are most abundant—and therefore most likely to represent grave goods—in Gravettian burials, and they can help answer whether the ornaments found in burials clearly differ from those most likely to have been worn in daily life. Table 17.3 synthesizes the available data about the number of beads and their placement on the body. Figure 17.3 (left) shows the proportional importance of adornments on given anatomical regions, and demonstrates that most ornaments were worn on the upper part of the body, especially on the head (38%), neck/torso (17%), and arms (14%). The shading reflecting presence/absence of ornaments on given adorned body part (ABP) in Table 17.3 shows the same overall trend (see also Fig. 17.3 (right)). There is in fact a very strong and statistically significant relationship between the proportional frequency of an ABP and the proportion of total beads associated with that ABP ($r^2 = 0.90$, $p = 0.046$).

There is, however, a disparity between the proportion of all beads found on given ABPs and how frequently these body parts were decorated. For instance, while the head accounts for 37.3% of all ABPs, fully 69.8% of all beads in our sample are found on that body part. In contrast, the neck/torso accounts for 16.9% of all ABPs and 17% of all beads. This means that, on average, head ornamentation was almost twice as elaborate as that for the torso, and much more so than any other ABP (Table 17.3). This observation stands in sharp contrast to the general Western tendency of confining our interpretation of bead use as part of ornaments draped around the neck (Dubin 1987: 17). This, then, lends empirical support to prior arguments that Gravettian ornaments were preferentially located on the upper body (Gamble 1999, Mussi 2001, Henry-Gambier 2008). It also supports the idea that ornaments were preferentially located on parts of the body that were easiest to see at a distance, and thus best suited to effectively visually broadcasting social information in an emblematic manner (cf. Wiessner 1983, Barton et al. 1994). Other considerations, such as climate, certainly affected the prevalence of headwear in the Upper Palaeolithic. However, the fact that such ornaments are found from the Russian Plain to southern Italy throughout that interval suggests to us that we are, in fact, dealing with an intentional selection of the upper body as a preferred location for ornamentation during that time.

That said, most buried Gravettian individuals were wearing few (usually one) ornaments, which varied considerably in terms of their richness. In fact, 23 of the 27 buried individuals wearing ornaments had beads associated with the head or the neck/torso

Table 17.3 Bead counts per body area for adorned Gravettian individuals

Burials	Around body	head	neck/torso	arms	Wrists	pelvis	legs	ankles	Total beads	Min ABP	References
Barma Grande 2		11*	24*				2		37	3	4, 7, 25, 28.
Barma Grande 3		5*	1						6	2	4, 7, 25, 26, 28.
Barma Grande 4		15*	33*		1				49	3	4, 7, 25, 26, 28.
Barma Grande 5		10*	5*						15	2	26.
Barma Grande 6	2*								2	1	26.
Brno 2		600							600	1	5, 13.
Cavillon 1		223					41		264	2	20, 27.
Dolní Vestonice 4		42							42	1	13.
Dolní Vestonice 13		22							22	1	13, 14, 15, 23.
Dolní Vestonice 14		5							5	1	13, 14, 15, 23.
Dolní Vestonice 15		4							4	1	13, 14, 15, 23.
Dolní Vestonice 16				2		2			4	2	23.
Grotta delle Arene		297*	36*		18*		2		353	5	6.
Candide II Principe											
Grotta di Baouso			3	57	16		47		123	6	21.
da Torre 1											
Grotta di Baouso da		2*	164*	48			2		216	6	7.
Torre 2											
Grotte des Enfants 5		1		4*	4*				9	3	19, 27, 28.
Grotte des Enfants 6		8*							8	1	19, 28.
Kostenki 15		150							150	1	3, 16, 22.
Krems-Wachtberg 1A						30			30	1	9.
Lagar Velho 1	1	4	1						6	2	24, 29.

(continued)

Table 17.3 Continued

Burials	Around body	head	neck/torso	arms	Wrists	pelvis	legs	ankles	Total beads	Min ABP	References
Mal'ta 1		1	115*	1					117	3	10.
Ostuni 1		102		5*	4				111	3	8.
Ostuni 2		4*							4	1	8.
Paglicci 15		28	1		1			1	31	4	11, 17.
Paglicci 25		7							7	1	11, 18.
Paviland 1						5			5	1	1, 2, 12.
Veneri a Parabita 1		29							29	1	11, 19.

Notes: * Count obtained through our analysis of photos and drawings. Reference key: 1: Aldhouse-Green 2000; 2: Aldhouse-Green and Pettitt 1998; 3: Anikovich 1992; 4: Boyle 1925; 5: Breuil 1924; 6: Cardini 1942; 7: Carthailac 1912; 8: Coppola and Vacca 1995; 9: Einwögerer et al. 2006; 10: Golomshtok 1933; 11: Henry-Gambier 2005; 12: Jacobi and Higham 2008; 13: Jelinek 1991; 14: Klima 1987; 15: Klima 1988; 16: May 1986; 17: Mezzena and Palma di Cesnola 1972; 18: Mezzena and Palma di Cesnola 1993; 19: Palma di Cesnola 2001; 20: Rivière 1872; 21: Rivière 1873; 22: Soffer 1985; 23: Trinkaus and Svoboda 2006; 24: Vanhaeren and d'Errico 2002; 25: Verneau 1892; 26: Verneau 1899; 27: Verneau 1906; 28: Verneau 1908; 29: Zilhão and Almeida 2002.

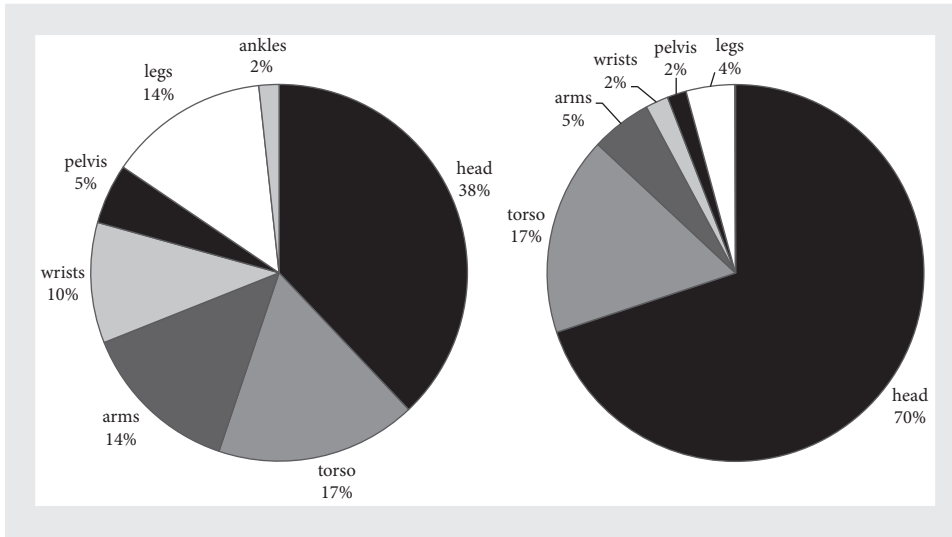


FIG. 17.3 Frequency charts of all adorned body parts (left) and total proportion of beads on each body part (right)

area. On one level, this pattern provides circumstantial support for the idea that these ornaments were used in Gravettian daily life. That is because buried individuals had certainly finished with broadcasting social information at a distance, which means that there was no necessary reason to position grave ornaments the same way as during life. In fact, it is perhaps not a coincidence that, of the four individuals found with no ornaments on the head or neck/torso, three are also the only ones to have been found with ornaments on the pelvis (i.e. Dolni Vestonice 16, Krems-Wachtberg 1A, and Paviland 1). It is likely that these represent 'true' grave goods, unlikely to have been used in more prosaic contexts. The Epigravettian double burial from Grotte des Enfants found with a 'blanket' of shells over the pelvic area of the deceased may represent a LUP analogue (Henry-Gambier 2001). Importantly, this idea is amenable to direct testing by looking at the wear patterns of beads found in burials.

Of course, many of the burials discussed here were excavated over a century ago using fairly coarse recovery methods. However, the bead count and ABP patterns for burials excavated before and after 1970 are broadly similar (Fig. 17.4), which suggests that our conclusions about the nature of ornamentation in UP burials are likely correct.

In sum, it is clear that the widespread idea that the majority of Gravettian burials were richly adorned distorts reality, based as it is on rare but striking instances of sumptuous ornamentation (e.g. Sungir, Brno). The rarity and overall sobriety of most ornaments, and the fact that most were likely worn by interred individuals before their death, suffice to undermine that received wisdom. Additionally, the data indicate that many individuals left the world of the living with few if any durable ornaments made by members of their society to mark that departure, a situation that was in fact the norm in the LUP.

Other possible grave goods are also often claimed to be common in UP burials. In this case, bone and stone tools are much more frequent in the EUP (48.6% of burials) than in the

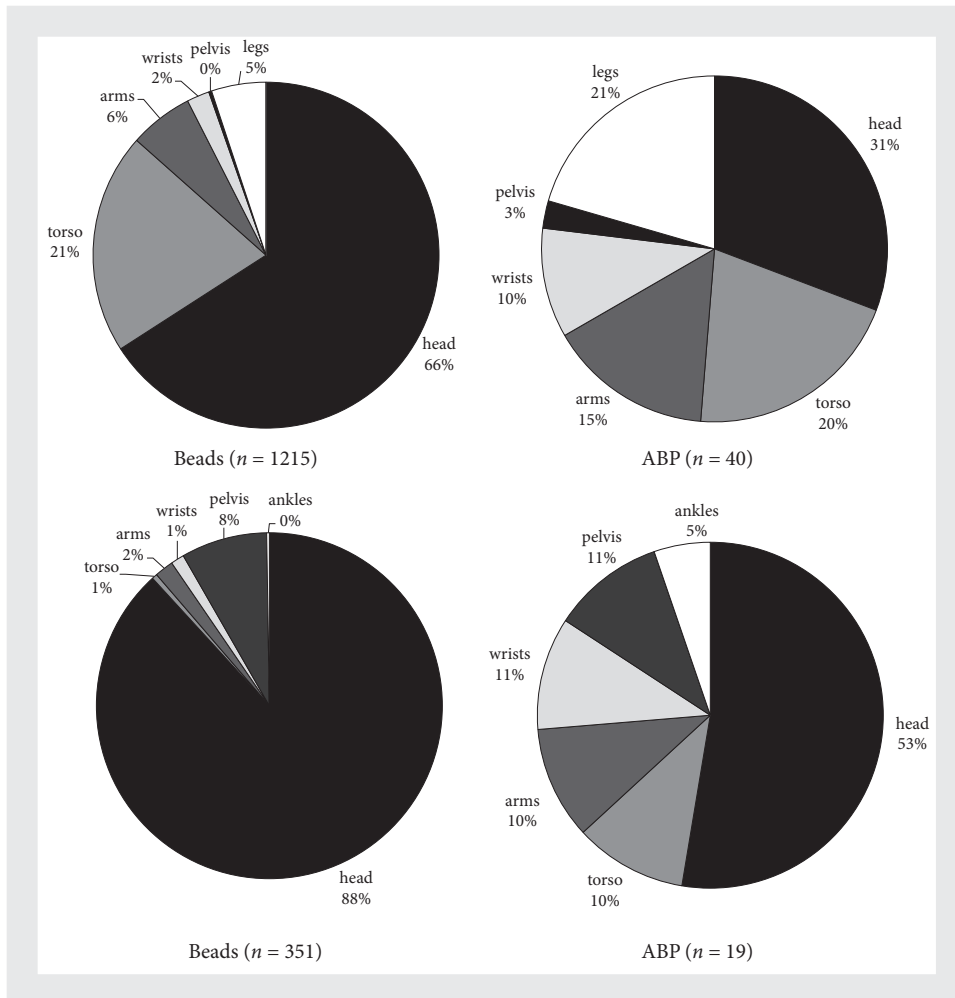


FIG. 17.4 ABP and bead count per body part for burials found before (top) and after (bottom) 1970

Notes: Before 1970 (top): $n = 15$; after 1970 (bottom): $n = 12$.

LUP (22%), though it is often hard to establish whether their inclusion was intentional or fortuitous (e.g. as part of the fill). The same applies to many faunal remains, which are found in about a third of all burials throughout the UP (34.3% of EUP burials, 34% of LUP). Other types of potential grave goods (including ivory spears, bone discs, and *bâtons de commandement* among many others) are associated with just over one-quarter of all burials in both periods (28.6% EUP, 26% LUP). Such objects are therefore rare occurrences in UP burials (especially as compared to ochre and ornaments), which again stands in contrast to one-size-fits-all descriptions of UP burials.

DISCUSSION AND CONCLUSIONS

It should be clear at this point that, contrary to widespread perception, it is almost impossible to define a 'typical' UP burial, or even one from the EUP or LUP. This is all the more noteworthy given the small sample size under consideration. This difficulty stems from three main causes. First, the patchy spatio-temporal distribution of burials makes it hard to compare them directly as manifestations of a common behaviour. Second, several sites and regions dominate both the EUP and LUP samples. This means that any trends in the UP funerary record are unlikely to reflect widespread cultural conventions as opposed to patterns limited to specific points in time and space. Third, even multiple burials from a single site show a great deal of internal variability. That is, there was little in the way of stereotyped burial norms that can be identified at most of these sites.

Since, as we have argued, many of the personal ornaments found in UP burials are likely to represent items worn in life, even regions such as Liguria, characterized by an apparent mortuary cannon revolving around personal ornaments, become analytically fuzzier when other dimensions of the record need to be emphasized. Likewise, empirical data now strongly undermine the common assumption that UP burials represent simply another form of symbolic behaviour whose expression and intensity fluctuated in response to climatic variation before, during, and after the Last Glacial Maximum.

We think that underscoring the peculiarities of the UP burial record is crucial to figuring out how best to analyse that class of evidence. Specifically, the observations derived from our sample can be used as baseline empirical parameters to develop questions most likely to yield new insights about the place and significance of burials in the lives of UP foragers. For one thing, they should encourage future research on burials to be based on more regionally focused approaches. Likewise, since burials operate symbolically at visual and social scales quite distinct from those of other forms of UP symbolism, another focus of study should be what made burial-rich loci significant for their inhabitants, and how that social significance articulates with others spheres of life, such as subsistence and land-use strategies. This would help us move beyond describing regional mortuary conventions, and towards attempting to reconstruct the belief system implicit in grave-specific features.

An example of this might be to ask what led people to select the Grotta delle Arene Candide as a burial ground used for over 1,000 years in two discrete phases during the Final Epigravettian (Cardini 1980, Formicola et al. 2005). This site is striking for having yielded the remains of over 15 individuals, many of which were recovered in elaborate graves (Cardini 1980), and for having been within sight of the coast throughout the UP and flanked by a large dune of white sand that made it conspicuously visible from a distance (Bietti and Molari 1994, Cassoli 1980). In terms of the ritual evidence, there is strong evidence that later burials showed a measure of respect for the skeletons from disturbed earlier burials (Cardini 1980, Formicola et al. 2005). The use of the site as a burial locality played out against a background of decreased health and stature of its occupants relative to earlier periods (Formicola and Holt 2007), and of the fact that Liguria is associated with clear evidence for subsistence stress in the LUP (Stiner et al. 2000, Stiner and Kuhn 2006). Taken together, these factors suggest the site was very probably a key point on a landscape peopled by a growing population of decreasingly mobile hunter-gatherers who put considerable pressure on both coastal and

inland resources (Francalacci 1989). As such, maybe it is an early example of a group's social investment in a landmark to reinforce its long-standing attachment and privileged access to that area and the resources within it (Saxe 1970, 1971, Goldstein 1981, Charles and Buikstra 1983, Littleton and Allen 2007). In that sense, it may have echoed some of the behaviour documented in the cemeteries of some other complex hunter-gatherer groups (e.g. Carr 1995, Schulting 1995). Even if this interpretation proves to be unsupported by future research, it at least provides a coherent framework within which to study the site itself as a component of Epigravettian settlement dynamics and to assign meaning to the variability documented between the individual burials it has yielded.

In conclusion, we propose that studies of UP burials as an *en bloc* phenomenon are unlikely to shed much useful light on forager lifeways between c.30–10,000 BP. If anything, the available data suggest that, overall, the average UP burial was a fairly sober affair, a far cry from the exceptional cases like Sungir that nonetheless continue to dominate the narrative, both in the scientific and lay literature. It is difficult to draw firm conclusions about the nature, form, and meaning of UP burials because the total sample is extremely small, especially considering the area and time they span. Add to that the fact that many burials are clustered in specific sites dating to very narrow time intervals, and it becomes clear that individual sites drive many of the patterns that can be gleaned from the record. Of course, it is necessary to periodically review and update the corpus of known interments so that researchers can discuss the issue with accurate information. However, at this point in the history of Palaeolithic research, we think the impetus of current studies of the UP funerary record should not be to try to identify general trends in the record. Instead, we should be focusing on teasing out information about the socio-ritual and economic contexts of burials; trying to understand how they articulate with other forms of mortuary ritual; and reconstructing what they and the sites/landscapes they were embedded in represent in terms of the lived realities of the groups that buried, consumed, and remembered them.

ACKNOWLEDGEMENTS

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SUGGESTED FURTHER READING

Binant, P. 1991. *Les sépultures du Paléolithique*. Paris: Éditions Errance [in French].

In this book, Binant compiles general characteristics of all Upper Palaeolithic burials found before 1991. Each burial is covered separately, with basic information such as the presence/absence of ornaments, ochre, etc.

Formicola, V. 2007. From the Sungir Children to the Romito Dwarf, Aspects of the Upper Paleolithic Funerary Landscape. *Current Anthropology* 48(3): 446–53.

This paper focuses on multiple burials found in the European Upper Palaeolithic and suggests that certain pathological individuals might have been treated differently from the rest of society during life and death, maybe being preferentially targeted for burial over others. It provides a provocative take on multiple burials in that period.

Formicola, V., Pettitt, P. B., Maggi, R., and Hedges, R. 2005. Tempo and Mode of Formation of the Late Epigravettian Necropolis of Arene Candide Cave (Italy): Direct Radiocarbon Evidence. *Journal of Archaeological Science* 32: 1598–602.

An analysis presenting dates for multiple individuals buried in the Epigravettian ‘necropolis’ of the Arene Candide. The authors show that the cave was used during two distinct phases, but that even over that c.1,000-year span, burial conventions changed little, lending credence to ideas about long-term cultural norms in this facet of life at the end of the Palaeolithic.

Giacobini, G., 2007. Richness and Diversity of Burial Rituals in the Upper Paleolithic. *Diogenes* 54(2): 19–39.

A review of the evidence for Upper Palaeolithic burials in Italy. It provides an overview of the burials and what they contain, along with generalizations about regional patterns.

Harrold, F. B. 1980. A Comparative Analysis of Eurasian Paleolithic Burials. *World Archaeology* 12: 195–211.

This is one of the first comprehensive surveys of Palaeolithic burials. He uses general characteristics to infer the presence of general ritual practices across time and space, emphasizing differences between the Mousterian and the Upper Palaeolithic as a whole.

May, F. 1986. *Les sépultures préhistoriques: étude critique*. Paris: Éditions du Centre National de la Recherche Scientifique [in French].

In this book-length review, May quotes and translates important information given on burials found before the 1980s. She also draws some links based on similarities and differences found in certain burials.

Pettitt, P. B. 2010. *The Palaeolithic Origins of Human Burial*. New York: Routledge.

A book-length review of the evidence for mortuary behaviour from the Lower to the Upper Palaeolithic. It provides a general introduction to the evidence for burial, which is complemented with that for other potential types of pre-agricultural mortuary evidence.

Riel-Salvatore, J., and Clark, G. A. 2001. Grave Markers: Middle and Early Upper Paleolithic Burials and the Use of Chronotypology in Contemporary Paleolithic Research. *Current Anthropology* 42(4): 449–79.

A comparison of the evidence for burial in the Middle and Early Upper Palaeolithic, which emphasizes that if the same criteria are applied to both periods, we must conclude that intentional burial was either present or absent in both periods.

Zilhão, J. 2005. Burial Evidence for the Social Differentiation of Age Classes in the Early Upper Palaeolithic. In: D. Vialou, J. Renault-Miskovsky, and M. Patou-Mathis (eds.) *Comportements des Hommes du Paléolithique Moyen et Supérieur en Europe: Territoires et Milieux: Actes du Colloque du GDR 1945 du CNRS, Paris, 8–10 janvier 2003*. Liège: Études et Recherches Archéologiques de l’Université de Liège 111: 231–41.

A review of Early Mousterian, Late Mousterian, and Gravettian burials that focuses on the demographic dimension of the buried. The study shows that fewer infants were buried in the Gravettian than in earlier periods, suggesting that a different conception of personhood might have characterized that period relative to that found in the Mousterian.

Zilhão, J., and E. Trinkaus. 2002. Social Implications. In: J. Zilhão and E. Trinkaus (eds.) *Portrait of the Artist as a Child, the Gravettian Human Skeleton from the Abrigo do Lagar Velho and its Archaeological Context*. Lisbon: Instituto Português de Arqueologia: 519–41.

This book provides extensive coverage of the archaeological context in which the child of Lagar Velho was buried. It also places this burial in its prehistoric context with a quick reviewing of other contemporaneous burials.

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